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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,571	12/05/2003	Kenichi Suenaga	1422-0611P	7359

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EXAMINER	
MARCHESCHI, MICHAEL A	
ART UNIT	**PAPER NUMBER**
1755	

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/727,571	SUENAGA ET AL.	
	Examiner	Art Unit	
	Michael A. Marcheschi	1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) *9-20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Applicant's election with traverse of Group I, claims 1-8 in the reply filed on 10/26/05 is acknowledged. No reasons traversing the restriction is defined.

The requirement is still deemed proper and is therefore made FINAL.

However, applicants request rejoinder of the non elected claims and upon allowance, they will be rejoined

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 is indefinite because it refers to formula (5) but the claim is silent as to formulas 2-4.

The claim is also indefinite because it appears to be defining an independent and separate relationship than that disclosed in claim 1. Claim 1 defines a relationship in terms of a formula but the formula in claim 21 does not further limit the formula defined in claim 1. The formulas are entirely different, thus how does claim 21 further limit the scope of claim 1? It would appear that the formula defined in claim 21 is outside the scope of the formula defined in claim 1.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshima (789) for the same reasons set forth in the previous office action which are incorporated herein by reference.

New claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oshima (789).

Although the reference fails to literally teach the particulars of formula (1), as defined in claim 21, as can be seen from the particle sizes defined throughout the reference, it is the examiners position that the values defined and extrapolated from these values, when calculated in terms of a frequency, using the claimed formula, encompass the claimed limitations absent evidence to the contrary. This is apparent because the instant claims fail to define any definite frequency values. All that is definitely defined in the size and since the size can be the same, one can calculate a frequency from claimed formula 1 and therefore, absent any specific frequency, the calculated values reads on the claimed limitations.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshima et al. (146) for the same reasons set forth in the previous office action which are incorporated herein by reference.

New claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oshima (146).

The reference defines a frequency and particle size and it is the examiners position that the frequencies of the copending application can encompasses the formula defined in claim 21,

especially since the instant claims fail to define any definite frequency values. All that is definitely defined in the size and since the size can be the same, one can calculate a frequency from claimed formula 1 and therefore, absent any specific frequency, the calculated values reads on the claimed limitations. In the alternative and with respect to other particles sizes defined (but not literally defined in terms of a volume frequency with a corresponding formula), although the reference fails to literally teach the particulars of formula (1), as defined in claim 1, as can be seen from the particle size distribution, it is the examiners position that the values defined and extrapolated from these values, when calculated in terms of a frequency, using the claimed formula, encompass the claimed limitations absent evidence to the contrary. This is apparent because the instant claims fail to define any definite frequency values. All that is definitely defined in the size and since the size can be the same, one can calculate a frequency from claimed formula 1 and therefore, absent any specific frequency, the calculated values reads on the claimed limitations.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koichi et al. (175) for the same reasons set forth in the previous office action which are incorporated herein by reference.

New claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koichi et al. (175)

Although the reference fails to literally teach the particulars of formula (1), as defined in claim 21, as can be seen from the particle sizes defined throughout the reference, it is the examiners position that the values defined and extrapolated from these values, when calculated

in terms of a frequency, using the claimed formula, encompass the claimed limitations absent evidence to the contrary. This is apparent because the instant claims fail to define any definite frequency values. All that is definitely defined in the size and since the size can be the same, one can calculate a frequency from claimed formula 1 and therefore, absent any specific frequency, the calculated values reads on the claimed limitations.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al. (711) for the same reasons set forth in the previous office action which are incorporated herein by reference.

New claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al. (711).

Although the reference fails to literally teach the particulars of formula (1), as defined in claim 21, as can be seen from the particle sizes defined throughout the reference, it is the examiners position that the values defined and extrapolated from these values, when calculated in terms of a frequency, using the claimed formula, encompass the claimed limitations absent evidence to the contrary. This is apparent because the instant claims fail to define any definite frequency values. All that is definitely defined in the size and since the size can be the same, one can calculate a frequency from claimed formula 1 and therefore, absent any specific frequency, the calculated values reads on the claimed limitations.

Applicant's arguments filed 10/26/05 have been fully considered but they are not persuasive.

Applicants provide the statement that Oshima (789) and Oshima et al. (146) had the same assignee at the time of the latter invention" thus it is not citable against the instant claims as of its filing date. The examiner acknowledges this statement however, said statement is **not** sufficient to overcome the rejection because it lacks the specific statement required, as defined in MPEP 706.02(l)(2) (i.e. **at the time the invention was made**). Applicants statement does not specify "at the time the invention was **made**".

The rejection based on Takashina et al. has been withdrawn in view of the certified translation of the priority document.

Applicants argue that Koichi et al. teaches in embodiments 1 and 2 a favorable D10 value and a favorable percentage of sizes less than 40 nm. The examiner acknowledges these teachings but these teaching are the preferred embodiments, and as is well known, a reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments **See *In re Van Marter*, 144 USPQ 421.** Applicants also refer to the examples of the reference but a reference is not limited to only the examples. Applicants also argue that the distribution defined in the reference is on a number basis and it can not be directly compared with a distribution on a volume percent. The examiner is unclear as to this argument because the size distribution of the reference must contain a volume of sizes and burden is upon applicants to show clear evidence as to why the distribution of the reference would not constitute particles in the claimed volume relationship. It is the examiners position that from the data of the percentages for the D10 value (column 5, lines 1-5) coupled with percentages for the D50 and

D90 (column 4, lines 32-41), as well as, figures 5-6, volume percents can be determined (depending on the size and density of the silica used), and this appears to encompass the claimed values. Applicants have not provided any clear evidence establishing that the claimed volume relationship is patentable over this reference. Finally, the distribution of the reference must have some volume associated therewith and applicants have not shown clear evidence as to why the distribution of the reference will not meet the claimed formula.

Applicants argue that the distribution defined in Ota et al. is on a number basis and it can not be directly compared with a distribution on a volume percent. The examiner is unclear as to this argument because the size distribution of the reference must contain a volume of sizes and burden is upon applicants to show clear evidence as to why the distribution of the reference would not constitute particles in the claimed volume relationship. It is the examiners position that from the data of the percentages for the individual silica's, volume percents can be determined (depending on the size and density of the silica used), and this appears to encompass the claimed values. Applicants have not provided any clear evidence establishing that the claimed volume relationship is patentable over this reference. Applicants also appear to argue the examples (preferred embodiments) of this reference, but as is well known, a reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments **See *In re Van Marter*, 144 USPQ 421.** Finally, applicants state that the instant specification (i.e. table 4) establishes unexpected results over this reference. The examiner acknowledges these results, however, any evidence provided is not commensurate in scope with the claims. The claims are much broader in scope that that defined in the tables. Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of

unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356. Finally, the distribution of the reference must have some volume associated therewith and applicants have not shown clear evidence as to why the distribution of the reference will not meet the claimed formula.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11/05
MM

Michael A Marcheschi
Primary Examiner
Art Unit 1755